IN THE MATTER of the Resource Management Act 1991

and

IN THE MATTER of the hearing of an application by South Wairarapa District Council

TOThe Wellington Regional Council for resource
consents for the proposed upgrade and operation of the
Martinborough Wastewater Treatment Plant, and all
associated discharges to land, water and air.

BEFORE A Panel of independent Commissioners

PRELIMINARY LEGAL SUBMISSIONS ON BEHALF OF THE APPLICANT

- I am Counsel for the Applicant in relation to this application and related applications in respect to upgrades and discharges from the Greytown and Featherston waste water treatment plants.
- 2. I will be present at the hearing and will if necessary provide supplementary submissions, however I considered that it would be useful for the Panel, to have my views on key issues prior to the hearing. That may serve to narrow the issues at the hearing and allow for the Panel to determine whether it requires any further legal advice from Counsel for the Regional Council. In my view it will not be necessary for the Panel to have a legal advisor present at the hearing and <u>if</u> there are any residual legal issues, those can be addressed in writing either before the hearing or before the hearing is formally closed. The Applicant should not be expected to meet the cost of advice which has not been requested by the Panel.
- 3. Mr Geange has outlined the key residual issues and his opinions in respect of those in his rebuttal evidence. There is a significant overlap between the legal position and the planning position on those matters. I have read the evidence of Mr Geange and am satisfied that his views on the issues of term of consent, whether amendments are within scope, and instream standards are in accordance with my opinion as to the law on these matters. Accordingly I can keep these submissions brief since the key points have already been covered by Mr Geange.

4. Firstly, by way of context, I note that although there is one application this is necessarily for a number of activities and discharge permits as follows:

WWTP site

- a) Discharge to water (reducing over time)
- b) Discharge to land from pond where contaminants may reach water
- c) Discharge to land (via irrigation) where contaminants will reach water
- d) Discharge to air

Pain Farm

- e) Discharge to land from irrigation (increasing from stage 2A to stage 2B)
- f) Discharge to land from stage 2B pond leakage
- g) Discharge to air (potential odour)

The Panel has a full discretion to grant consent for all of those components or to decline consent for some of them. Equally, the Applicant is at liberty to withdraw any of those components from its application at any time up until the hearing is closed.

Overview of the environmental benefits from the proposal

- 5. It is important that the Panel understand the significance of this proposal. SWDC is punching above its weight. It is a small Council with a limited rating base. The Martinborough WWTP is one of three treatment plants it is addressing as a package. In terms of adverse effects on the environment the Featherston and (less so) the Greytown discharges are more problematic. There is a significant pressure from to reduce or eliminate waste water discharges direct to surface water.
- 6. Masterton DC has recently addressed that issue by moving to land discharge at times of low river flow. Its has a 25 year consent (to 2034) to continue discharging treated wastewater to the Ruamahanga River at flows above median in summer and above half median in winter. Carterton DC has recently been granted a consent to continue discharging to land in circumstances where the contaminants reach water.¹²

 $^{^2\,}$ The Carterton consent was granted despite the Panel's conclusion that the discharge would continue to breach section 107 for its duration.

- 7. SWDC has after extensive consultation and debate embarked upon a costly and innovative scheme to virtually eliminate all of its direct discharges of wastewater to surface water by 2035 and to move to land treatment from 2030. It has acquired or has access to land near all three plants to allow that to occur. That land acquisition process has been at significant cost. The implementation of these three schemes will come at further significant cost. It is within this context that it is seeking the planning and investment certainty of 35 year consents for all three upgrades. This context also explains the staged approach which it has adopted for all of the schemes. (the staging and the 35 year term are integral to the overall proposal). It is easy to ask for more haste, but it is important to remember that SWDC will be doing more than its required in terms of ecological effects and more than its neighbouring Councils.
- 8. It is also important to understand the benefits achieved at each stage. These are summarised in Mr Geange's primary evidence. In summary however:

Stage 1A (2015) modest benefits as compared to the current situation

Stage 1B (November 2017) elimination of direct discharge to the river at flows below half-median flow and significant reduction of direct discharge at flows between half median and median. Significant reduction in contaminant loadings at . flows below median and significant reductions in total annual contaminant loads.³

Stage 2A (2030) A move to full *land treatment* of the discharge at flows below halfmedian flow and a further significant reduction in direct discharge between half median and median flow. All of this results in further significant reduction in contaminant loads at these flows (below median) and annually. (Operationally, the priority of discharge is to land, and when that can't be achieved, only then will a discharge to water occur.)

Stage 2B (2030) A move to almost full time land treatment at almost all flows with further reduction in annual nutrient loads.

9. In simplistic terms stage 1B achieves the most "bang for the buck" in relation to river ecology in the shortest time. Stage 2A provides further significant improvements in water quality at the flows when that is most important. The principal benefits of stage 2B are in terms of largely eliminating any effect on the Mauri of the river and in terms of general perceptions about the discharge of human waste to water. There are also benefits in terms of the total contaminant loading to the river and the lake, however these benefits relates to times of higher flow (above median) when the river is less sensitive to such reductions.

- 10. This context is important. It would be simplistic to focus on the benefits of stages 2A and 2B without acknowledging the significant benefits from stage 1B. This is relevant in the context of the issues regarding the term of consent and the desire by some submitters to advance stages 2A and 2B. In my submission there is no evidential basis for requiring that. The evidence is that at least after stage 1B the discharges (direct and indirect) will not cause any significant adverse effect on aquatic life.
- 11. It is significant, that the proposed staging and the proposed flow triggers are supported by the Regional Council officers. In my submission, the staging and 35 year term of consent go hand in hand. SWDC needs certainty for the significant investment involved and certainty in terms of the wider context in relation to the other two upgrade plans. It is this total package, which has been approved by the District Council and provided for in its Long Term Plan.

Term of consent and lapse period

- 12. The Applicant has applied for a 35 year term of consent for all of the permits. It will also necessarily require an extended lapse period for all of the permits relating to Pain Farm. The staging of stages 1A and 1B can be accomplished via the conditions of consents and does not require extended lapse periods. Permits (e) and (g) will need a lapse period until 2031 and permit (f) until 2035.
- 13. The Panel will be familiar with the case law regarding term of consent. In essence an application should be granted for the term sought unless there are sound resource management reasons for a lesser term. This involves balancing the need for certainty and application costs against whatever reasons are established supporting a shorter term. Usually, as in the present case the critical issue will be whether a shorter term is required in order to address any uncertainties and the risk of greater adverse effects than have been anticipated at the time of grant.
- 14. I agree with Mr Geange, that a number of the reasons advanced by Ms Arnesen in her report are of marginal relevance and the others are not supported by the evidence.

Compliance history

15. The compliance record of SWDC is of little relevance to the term of consent. This is not a situation where there is a considerable risk of non-compliances continuing. Furthermore both authorities agreed to focus on the long term solution rather than pointless enforcement action. In contrast to the current situation, the application is for a course of action intended to address adverse effects on the environment by progressively moving from direct discharge to water, to indirect discharge and on to full land treatment. Any uncertainties in relation to the latter can be addressed by adaptive management and if required, enforcement action. The term of consent should not be seen as a penalty for previous non-compliance. In any event, the most significant non-compliance has been with achieving the very upgrade which is now proposed.

The fact that the discharge includes an application for discharge to water

- 16. The Regional Plan does not set out a policy of generally only granting consent for a maximum of 25 years for a discharge of wastewater to water. To the extent that the desire for a shorter term reflects a Management position as opposed to the considered and reasoned opinion of the reporting officer, that desire is irrelevant.
- 17. In any event as pointed out by Mr Geange, the uncertainties relied upon relate to discharge to land rather than discharges to water. It is accepted that there is the potential for some of that discharge to reach water, however the net result of implementing stages 2A and 2B will be much reduced discharge to the river. In that context reducing the term of consent by 10 years will not provide any advantage in terms of managing the discharge of primary concern, which is the direct discharge to the river. The proposal is that within 20 years that direct discharge will be largely eliminated. Reducing the term of that consent from 35 to 25 years will achieve no resource management purpose and would be different from the proposal which the District Council has approved and applied for. The key issue in fact relates to the term of consent for the Pain Farm components. That is the aspect in relation to which there are some uncertainties.

Addressing uncertainty in relation to discharge to land at Pain Farm

- 18. I acknowledge, that it is somewhat unusual to be seeking consent for activities which are not proposed for 15 to 20 years. However it is there is no barrier to the grant of consent for those activities provided the Panel is satisfied that it has sufficient information and that any residual uncertainties can be addressed by way of conditions and adaptive management.
- 19. The evidence for the Applicant has addressed land discharge capacity at Pain Farm. There are however some residual areas of uncertainty or at least disagreement between the experts. It is for the Panel to determine whether it has sufficient information in order to grant the Pain Farm consents.
- 20. The key issue is whether it is satisfied that the adaptive management conditions (including the review condition) are sufficient to address the risk of significant unanticipated adverse effects on the environment. In my submission the evidence

suggests that firstly any unanticipated effects are unlikely to give rise to significant adverse effects on the environment. Secondly the proposed adaptive management regime coupled with the review provision and if necessary enforcement powers are more than sufficient to address any residual uncertainty. If the Panel reaches a different view on that matter, then that would suggests that the Pain Farm consents should be declined.

- 21. I cannot see how granting the consents for a 10 year period for stage 2A and a 5 year period for stage 2B would achieve anything in terms of addressing the possibility (if it exists) of these stages causing significant adverse effects on the environment. If (contrary to the opinions of Ms Beecroft) the proposed discharge rates transpire to be too high, then they will have to be reduced under the proposed Effluent Discharge Management Plan and Land Discharge Management Plan. That in turn may require more storage at stage 2B and/or increased land area⁴ or increased direct discharge to the river. The latter would not be authorised by the discharge to river permit. Accordingly any increased direct discharge to the river would need to authorised by way of either an application to vary that permit or a new application for such discharge which is not part of the current proposal beyond 2035.
- 22. In my submission these mechanisms address the issues of uncertainty which have been raised. If the Panel is still not satisfied on this point then it should decline the Pain Farm consents. It is accepted that this would lead to a shorter duration for the discharge to river consent because the mitigation proposed for 2030 and beyond would no longer be part of the proposal. However, in my submission you will not need to consider this option because there is a sound basis for a 35 year consent.

Planning and investment certainty

23. The primary reason for a long term of consent is the need for planning and investment certainty. In the present case the Council has, in consultation with the community and the Regional Council developed an overall strategy for progressively upgrading and moving to land based treatment for all three of its treatment plants. The officer's report does not take issue with the staging proposed for the Martinborough discharges. The combined costs/investment involved for this small council are very significant. Achieving planning and investment certainty by obtaining consents for the maximum term possible is a key part of that strategy.

⁴ The Martinborough golf course is an option which the Council has under consideration as a backstop.

- 24. Stage1B of the proposal will itself result in a significant reduction in direct and indirect discharge to water at the times of low flow when that is most important, with corresponding improvements in water quality. However stage 2A and the move to *land treatment* at all but higher flows provides further significant benefits in terms of water quality. Stage 2B involves land treatment at all but very high flows. This provides additional significant benefits in terms of reduction of contamination of the river and lake and addresses cultural concerns.
- 25. In order for the Council to invest in stages 2A and 2B it requires investment certainty. A 35 year consent term respectively provides 20 and 15 years of certainty for those investments. A 25 year term would provide 10 and 5 years certainty. It would be imprudent of the Council to invest in such a major upgrade on the basis of such limited certainty. Furthermore, that is not what the Council has planned for or approved.
- 26. The Panel should only contemplate a shorter a consent if that is truly necessary to address uncertainty. In my submission the level of uncertainty is relatively modest and manageable. If the Panel has a different view then it will need to determine whether the uncertainty is such that the Pain Farm consents should be declined. If the level of uncertainty is not such as to justify decline of those consents, it is difficult to see how it would justify a shorter term.
- 27. If the Panel does consider such a term to be appropriate, then the Applicant requests the Panel to decline the Pain Farm consents. (Alternatively, it should invite the Applicant to decide whether to withdraw the applications relating to Pain Farm.

Scope of Application

- 28. The DLA Phillips Fox opinion suggest that the deletion of stages 2A and 2B and the grant of a 20 year term of consent for the consents relating to the WWTP site (and) would be beyond the scope of the current application because the adverse effects would be greater than anticipated. That is not necessarily the case.
- 29. For the first 15 years of consent the effects would be the same as proposed because stage 2A is not proposed within that period. The issue is whether the extension of such discharge for <u>a further 5 years</u> gives rise to significantly different effects from what is proposed. (the effects beyond the 20 year term are irrelevant) Whilst the effects on the river would continue during those 5 years, those effects would already have been significantly mitigated by stage 1B. Furthermore any adverse effects from stage 2A would not be occurring during those 5 years. (The absence of the significant benefits of

stage 2B from 2035 are irrelevant because those benefits would not have occurred during the 20 years.)

30. Alternatively, (in the unlikely event that you reach this point) the grant of a 15 year term for the WTTP consents and the withdrawal (or decline) of the Pain Farm consents, would certainly not require re-notification. <u>The effects of granting a 15 year consent are identical during that term to the effects of what was applied for.</u> The effects beyond that term are not relevant, they would become a matter for future applications.

Are instream compliance standards necessary and appropriate?

- 31. The reporting officers are proposing instream compliance standards. The rationale for those standards is unclear. The principal debate is around the so called "reasonable mixing zone" and in particular in relation to the suggested QMCI standard of no greater than 20% change. I will come back to that matter, but the wider issue is whether any instream standards are necessary.
- 32. The application proposes mitigation of adverse effects on surface water quality and aquatic life, by way of four mechanisms:
 - The level of treatment of the wastewater discharge to water and land
 - The elimination (at stage 1B) of direct discharge to water at low flows when such discharge has the most potential for adverse effects. (with resulting reduction in contamination at such flows).
 - A move to land treatment of the discharge at stage 2A to further reduce contaminants reaching water.
 - A move to virtually full time land treatment (2B) by 2035 with a further reduction in contamination
- 33. It is accepted that instream monitoring is desirable to confirm the benefits achieved at each stage. It is not accepted that it is necessary to impose instream compliance standards to ensure that adverse effects are adequately avoided, remedied or mitigated.
- 34. The proposed effluent standards and the staged reduction in direct discharge are the proposed mitigation measures. It is for the Panel to assess whether these mechanisms are sufficient to justify the grant of consent. The imposition of instream standards is not required as an additional form of mitigation and indeed would not achieve mitigation.

- 35. If such standards cannot be achieved that would not necessarily be indicative of a significant adverse effect on aquatic life or any other unacceptable adverse effect. What it would do is trigger non-compliance and potentially lead to enforcement action and inevitably lead to pressure to further treat the discharge. It might also lead to pressure to bring forward the other stages of the proposal. However standards are not necessary to achieve that. The review powers under section 128 are wide enough to allow any significant adverse effects (or changes in standards) to be addressed without waiving the "non-compliance" stick.
- 36. The bottom line for SWDC, is that it cannot accept any instream standards where there is uncertainty as to compliance.

The suggested QMCI standard

- 37. In relation to the suggested QMCI standard, its position is that even if the compliance point was shifted to 500m the proposed standard is inappropriate and unnecessary. (Mr Coffey does not consider that this is necessary as a compliance standard and instead proposes it as monitoring standard. (a trigger for further assessment).
- 38. The joint statement is clear, that neither of the experts are confident that the QMCI standard can be achieved at 250m. They appear optimistic that it can be achieved at 500m, however I do not think that either witness is in a position to be certain on that point. The difficulty is that they are basing their assessments on the current situation and the current discharge point. This seems to ignore the fact that from stage 1B at times of flow below half median, there will be no direct discharge and at flows between half median and medinan on average only 19%⁵ direct discharge. Accordingly at the flows when the discharge has the greatest potential to affect QMCI, the most of the discharge will be a diffuse discharge (via land) which will occur over some unknown distance downstream of the disposal field and downstream at these times. Neither witness is in a position to assess the point at which full mixing, or reasonable mixing, of the (most relevant) diffuse discharge occurs. However, it is unnecessary to carry out such an assessment. The focus should be on the effects of the combined discharge.
- 39. The whole issue of the point of reasonable mixing diverts attention from the real issue. The focus should be on monitoring the effect of stage 1B in terms of impact on QMCI (and other parameters) between the current discharge point and a point well downstream which takes in to account all of the diffuse discharge. This is a monitoring issue not a compliance issue. Within that context in my submission the proposed mixing

⁵ See Table 2 of Mr Geange's primary statement.

study serves little if any purpose. <u>The concern should be with the nature and extent of</u> <u>effects not with a debate about where full mixing and reasonable mixing occur.</u>

- 40. There is no need to determine the point of reasonable mixing unless one is intending to impose a standard for the purpose of reflecting section 107. However, as discussed below that is unnecessary.
- 41. As discussed by Mr Geange there are a number of difficulties with the proposed QMCI standard.
 - It is unnecessary and will achieve nothing that cannot be achieved by way of monitoring and adaptive management
 - It would deflect attention from the move to land discharge back to the issue of the standard of treatment. (which is defined by effluent standards)
 - The suggested compliance point does not take into account reasonable mixing. There is no evidence to suggest that <u>the combined discharge</u> (direct and indirect) will be *reasonably mixed in* a physical sense, by 250 m downstream. Indeed there is no evidence that the diffuse discharge (which is the only discharge at low flows when effects on QMCI are most apparent) will be reasonably complete (let alone reasonably mixed) by this point.
 - 250m is in any event is not a "*reasonable*" mixing zone because it is *unreasonable* and unnecessary to expect the QMCI standard to be achieved at this point.
 - So far as the suggested QMCI target is proposed as a proxy for *"no significant adverse effects on aquatic life"*, there is no proper policy or evidential basis for that approach.
- 42. I will address the last point in more detail. Firstly, section 107 does not require the imposition of instream standards. What it requires is that the Panel decline consent if it considers that significant adverse effects on aquatic life are likely to occur **and** if it is not satisfied that either of the exceptions are applicable. In summary, adopting a back stop position of imposing an arbitrary standard as a proxy of s 107 compliance is unnecessary and would be counterproductive. This approach in essence side stepping the duty under section 107.
- 43. Secondly, there is no policy basis for the suggestion that breach of the proposed standard necessarily equates to a significant adverse effect on aquatic life after

reasonable mixing. The Plan does not include this suggested standard as such. Nor does it include it as a guideline or target. (Dr Ausseil refers to the One Plan, however that is not a relevant plan and in any event, uses this measure as a target not a standard).

- 44. Thirdly, there is no proper scientific basis for <u>assuming</u> that a breach of this standard would equate to a significant adverse effect on aquatic life. With all respect to the water quality experts, their joint agreement that: "20% change to QMCI is <u>an adequate</u> <u>threshold</u> for significant adverse effects on macro-invertebrate communities" is not soundly based **if** it is intended to imply that anything over 20% will necessarily equate to a significant adverse effect on aquatic life downstream of the measurement point.⁶
- 45. If the experts mean that a less than 20% change in QMCI is <u>generally indicative</u> of a less than significant adverse effect on aquatic life and that more than 20% change suggests a need for closer inquiry, then they would be on sound ground. The notion that 20% change is a *threshold* beyond which less than significant effects become significant is illogical and not in accordance with how the significance of adverse effects is determined under the RMA (or in science).
- 46. QMCI is a measure of the degree of change to macro-invertebrate <u>community</u> <u>structure</u>. A significant change in QMCI (community structure) is one **indicator** of a cause for concern as to whether significant adverse effects may be occurring. The 20% figure is not however a **determinant** of whether that is in fact the case. In short, a 20% change to QMCI, is an appropriate monitoring parameter, it is not a determinant of whether there is in fact a significant adverse effect on aquatic life. That will depend upon a proper assessment of the significance of the change to the community structure within the context of the particular receiving environment. Such an assessment is already provided for in the conditions requiring a near zone study.
- 47. In order to determine whether there is in fact a significant adverse effect after reasonable mixing, one would need to consider the *extent of change* to the community (how much greater than 20%?), the *areal extent* of the changes, their *frequency* and <u>duration</u> and the *significance* of all of these <u>within the context of the sensitivity of the particular receiving environment.</u> (The notion that 20% change in a low sensitivity/value environment is just as significant as the same change in a sensitive/high value environment is illogical.)

⁶ Note that this statement is in the context that Mr Coffey does not agree that standard is necessary as a compliance standard. Accordingly, I assume that he uses the word "threshold" as meaning a threshold for further assessment of significance rather than a determinant of significance.

- 48. In summary, I submit that the suggested in stream standard for QMCI is unnecessary and inappropriate, whether it applies at 250m or 500m. More generally, I submit that none of the instream standards are required.
- 49. Finally on this point, I note that the legal advice to the Panel on question of instream standards is based upon an incorrect assumption that the application proposed a particular standard of instream water quality. As outlined by Mr Geange in his rebuttal evidence, that is not the case. In fact it proposed 500m as a reasonable mixing zone and did not provide any assurance regarding the degree of change to QMCI.

Where to from here?

50. I note that the residual issues as between the Applicant's witnesses and those for the Regional Council are quite narrow. I suggest that there may be merit in the officers advising the Panel and parties, by 4pm on May 27 as to whether (in the light of these submission and the rebuttal evidence) there are any changes to the recommendations in relation to the matters in contention. This will allow the Commissioners and the Applicant, to understand the extent of any residual issues so that the hearing can be focussed on those. It is possible that this may allow the hearing to be completed in a day. The Panel may also wish to consider whether or not it requires any further legal advice on the matters I have discussed and if so whether that should be provided by the Regional Council's advisors, prior to, or at the hearing and whether it requires a legal advisor to the Panel to be present.

Philip Milne

Counsel for the Applicant

22 May 2015